

ABSTRACT OF THE DISCLOSURE

5 A plasma processing apparatus includes, in order to efficiently cool
an insulating plate having a relatively low thermal conductivity, a process
chamber, the insulating plate divided into a plurality of regions and
attached airtightly to the ceiling of the process chamber, a planar antenna
member placed above the insulating plate and including microwave
radiation holes for transmitting therethrough microwave used for
generating plasma, and a support frame member supporting the insulating
plate divided into a plurality of regions and including a heat medium path
10 for flowing a heat medium along a line by which the insulating plate is
divided into a plurality of regions and along a peripheral part of the
insulating plate.